REMARKS

Status Summary

Claims 1-11 are pending in the instant application and have been examined by the U.S. Patent and Trademark Office (hereinafter "the Patent Office").

Claims 1-11 have been rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Claims 1-11 also have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention.

Claim 2 has been amended by the present Amendment to independent form. Claims 3-9 have been amended herein to reflect their dependency on newly independent claim 2. No new matter has been added by the amendments to the presently pending claims. Reconsideration of the application as amended and based on the arguments set forth herein is respectfully requested.

Claim Rejection - 35 U.S.C. § 112, first paragraph

Claims 1-11 have been rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. The Patent Office asserts that the claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors were in possession of the claimed invention. More specifically, the Patent Office asserts that the specification fails to disclose that all known bis-aryl diamidoxime compounds, all amidoxime aryl halides, all 2,5-bis trialkyl stannanes, all aprotic solvents, and all palladium catalysts are embraced by the instant process. The Patent Office asserts that few examples are cited and only one working example is disclosed for each element. The Patent Office further asserts that Applicants must claim only those amidoxime aryl halides, 2,5-bis trialkyl stannanes, aprotic solvents, and palladium catalysts that have support in the specification. The Patent Office also suggests that the subject matter recited in claims 2-3 and 6-7 be added to claim 1. It also appears that the Patent Office means to suggest that the Q element of claim 2

should be limited to oxygen. After careful consideration of this rejection and the Patent Office's basis therefor, Applicants respectfully traverse the rejection and submit the following remarks.

Initially, Applicants respectfully submit that there is a strong presumption that an adequate written description of the claimed invention is present when the application is filed. See In re Wertheim, 541 F.2d 257, 263, 191 USPQ 90, 97 (CCPA 1976). Thus, a description as filed is presumed to be adequate, unless or until sufficient evidence or reasoning to the contrary has been presented by the Patent Office to rebut the presumption. See In re Marzocchi, 439 F.2d 220, 224, 169 USPQ 367, 370 (CCPA 1971). Further, as a matter of Patent Office practice, the burden rests upon the Patent Office to establish a prima facie case of a failure to comply with 35 U.S.C. § 112, first paragraph, with respect to the invention described and claimed in Applicants' patent application. See Guidelines for the Examination of Patent Applications Under the 35 U.S.C. 112, ¶ 1, "Written Description" Requirement (hereinafter "The Guidelines"), 66 Fed. Reg. at 1105. This includes "the initial burden, after a thorough reading and evaluation of the content of the application, of presenting evidence or reasons why a person skilled in the art would not recognize in an applicant's disclosure a description of the invention defined by the claims." Id. Further, the Patent Office must establish "by a preponderance of the evidence why a person skilled in the art would not recognize in an applicant's disclosure a description of the invention defined in the claims." Id. at 1107, citing Wertheim, at page 263. The Patent Office, therefore, must have a reasonable basis to challenge the adequacy of the written description, and, in rejecting a claim, the Patent Office must set forth express findings of fact which support the lack of written description rejection.

The Patent Office contends that the specification of the present U.S. patent application does not show that Applicants were in possession of the claimed invention. No specific scientific or other factual basis in support of this contention, however, has been presented in the Official Action. Rather, the Patent Office has offered only a series of conclusory statements, contending generally that the

specification of the present patent application does not adequately disclose to one of skill in the art that all known bis-aryl diamidoxime compounds, all amidoxime aryl halides and all 2,5-bis trialkylstannanes are embraced by the instant process. The Patent Office also makes similar assertions with regard to aprotic solvents and palladium catalysts. See Official Action, page 2, second paragraph.

Applicants further note that 35 U.S.C. §112, first paragraph, requires no more than a disclosure sufficient to convey to one of ordinary skill in the art that Applicants were in possession of the invention commensurate with the scope of the claims. <u>See The Guidelines</u> at page 1105, citing <u>Wang Labs. v. Toshiba Corp.</u>, 993 F.2d 858, 865 (Fed. Cir. 1993). Applicants respectfully submit that this requirement has been met.

Accordingly, Applicants respectfully submit that a prima facie case under 35 U.S.C. §112, first paragraph, has not been made. Thus, claim 1 is believed to be in compliance with 35 U.S.C. §112, first paragraph. Therefore, Applicants respectfully request that the Patent Office's rejection of claim 1 under 35 U.S.C. § 112, first paragraph, be withdrawn, and claim 1 be allowed at this time.

Assuming <u>arguendo</u> that the Patent Office has made a <u>prima facie</u> case of a failure to comply with 35 U.S.C. §112, first paragraph, Applicants respectfully submit the following.

The Patent Office's primary contention in support of the rejection under 35 U.S.C. §112, first paragraph, appears to be that the specification does not provide adequate written description for all bis-aryl amidoximes, all amidoxime aryl halides, all 2,5-bis trialkylstannanes, all palladium catalysts, and all aprotic solvents. The Patent Office further asserts that few examples are cited and only one working example is disclosed for each element.

Applicants respectfully submit that the written description requirement for a claimed genus can be satisfied through a sufficient description of a representative number of species by, *inter alia*, actual reduction to practice and disclosure of relevant identifying characteristics, such as structure, to show that the Applicant was in possession of the claimed genus. See MPEP § 2163 II.A.3(a)(ii) (citing Eli Lilly, 119 F.3d at 1568, 43 USPQ2d at 1406); see also The Guidelines, 66 Fed. Reg. at

1106. Applicants respectfully submit that the Laboratory Examples and structures of compounds **1-4** as provided in the specification as filed, show that the Applicants were in possession of the claimed genus at the time the application was filed.

Further, applicants respectfully submit that one of ordinary skill in the art, when provided with the formula described at page 4, lines 13-19, would have adequate direction in selecting suitable reagents, solvents and catalysts to practice the presently disclosed subject matter. Indeed, in view of the teachings of the presently disclosed subject matter, one of skill in the art would appreciate that the amidoxime aryl halide of claim 1 could comprise halides other than bromide, such as iodide and chloride, and that various aryl groups other than simple amidoxime phenyls could be used, including further substituted phenyls, multi-cyclic aryls, and heteroaryls. One of skill in the art also would appreciate that the 2,5-bis trialkylstannane could comprise furan, thiophene, pyrrole, and cyclopentadiene, as well as furans, thiophenes, pyrroles, and cyclopentadienes further substituted at the 3-, 4-, or 3- and 4-carbon. Moreover, one of skill in the art would be aware of many suitable Pd(0) and Pd(II) catalysts and aprotic solvents.

Accordingly, claim 1 is believed to comply with the written description requirement of 35 U.S.C. § 112, first paragraph. Withdrawal of the rejection of pending claim 1 under 35 U.S.C. § 112, first paragraph, is therefore respectfully requested. Allowance of claim 1 also is respectfully requested.

Further, Applicants have amended pending claim 2 to independent form and have incorporated the process steps (a)-(c) recited in original claim 1 therein. Support for this amendment is found in original claim 1. Also, claims 3-9 have been amended to be dependent from newly independent claim 2. No new matter has been added.

Applicants respectfully submit that the specification as filed, in particular Examples 1-4, provides adequate written description for the process of preparing a bis-aryl amidoxime of the structure as recited in amended claim 2.

Thus, Applicants respectfully submit that claim 2 as amended complies with the written description requirement of 35 U.S.C. § 112, first paragraph. Withdrawal of

the rejection of pending claim 2 under 35 U.S.C. § 112, first paragraph, is therefore respectfully requested. Allowance of claim 2 also is respectfully requested. Further, Applicants respectfully submit that pending claims 3-11, which are now ultimately dependent from claim 2, comply with the written description requirement of 35 U.S.C. § 112, first paragraph. Withdrawal of the rejection of claims 3-11 under 35 U.S.C. § 112, first paragraph, is therefore respectfully requested. Allowance of claims 3-11 also is respectfully requested.

Claim Rejection - 35 U.S.C. § 112, second paragraph

Claims 1-11 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for allegedly failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention. In particular, the Patent Office asserts that the term "comprises" in claim 2 renders the claim indefinite. Furthermore, the Patent Office asserts that claim 1 fails to define bis-aryl compounds, amidoxime aryl halides, and 2,5-bis trialkylstannanes, or to identify aprotic solvents and palladium catalysts in such a way as to determine the metes and bounds of claims 1-11. The Patent Office repeats its suggestion to add the subject matter recited in claims 2-3 and 6-7 to claim 1 with the element Q limited to oxygen.

Initially, Applicants respectfully note that claim 2 has been amended by striking the term "comprises" and inserting the term "having" in the amended claim. Accordingly, Applicants respectfully submit that the rejection based on the alleged indefiniteness of the term "comprises" has been rendered moot.

With regard to the rejection of claim 1 for allegedly failing to define bis-aryl compounds, amidoxime aryl halides, and 2,5-bis trialkylstannanes, or to identify aprotic solvents and palladium catalysts in such a way as to determine the metes and bounds of claims 1-11, Applicants respectfully submit that pending claims must be given the broadest reasonable interpretation consistent with the specification. See In re Morris, 127 F.3d 1048, 1054, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997); In re Prater, 415 F.2d 1393, 162 USPQ 541 (CCPA 1969).

Further, Applicants respectfully submit that the specification must be viewed from the perspective of the skilled artisan. According to the Court of Appeals for the Federal Circuit (hereinafter the "Federal Circuit"), "the definiteness inquiry focuses on whether those skilled in the art would understand the scope of the claim when the claim is read in light of the rest of the specification." See Orthokinetics, Inc. v. Safety Travel Chairs, Inc., 806 F.2d 1565, 1576 (Fed. Cir. 1986); see also Solomon v. Kimberly-Clark Corp., 216 F.3d 1372, 1379, 55 USPQ2d 1279, 1283 (Fed. Cir. 2000). Additionally, claim language need only "reasonably apprise those skilled in the art" as to the scope of the claim, and be "as precise as the subject matter permits." See Hybritech Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 1385 (Fed. Cir. 1986), cert. denied, 480 U.S. 947 (1987). And finally, the Federal Circuit has stated "if the claims read in light of the specification reasonably apprise those skilled in the art of the scope of the invention, § 112 demands no more." Id.

In view of the examples and representative formulae, the information set forth in the specification of the presently disclosed subject matter clearly defines the bisaryl diamidoxime compounds, amidoxime aryl halides, aprotic solvents, and palladium catalysts of the presently disclosed subject matter to one of skill in the art. Accordingly, Applicants submit that claim 1 meets the requirements of 35 U.S.C. § 112, second paragraph, with respect to the terms "bis-aryl diamidoxime compound," "amidoxime aryl halide," "2,5-bis trialkylstannanes," "aprotic solvent," and "palladium catalyst," and respectfully request that the Patent Office's rejection of claim 1 be withdrawn.

Applicant's respectfully submit that the Patent Office's rejections of claim 1 have been addressed and respectfully request that the Patent Office's rejections of claim 1 under 35 U.S.C. § 112, second paragraph, be withdrawn and claim 1 be allowed at this time.

Further, Applicants have amended pending claim 2 to independent form and have incorporated the process steps (a)-(c) recited in original claim therein. Support for this amendment is found in original claim 1. Also, claims 3-9 have been amended to be dependent from newly independent claim 2. No new matter has been added.

Applicants respectfully submit that the metes and bounds of amended claim 2 are defined by the bis-aryl amidoximes having the structure as recited therein. Further, Applicants respectfully submit that one of ordinary skill in the art, when provided with the recited bis-aryl amidoximes in view of the specification as filed, including the Examples, could select suitable amidoxime aryl halides, trialkylstannanes, aprotic solvents, and palladium catalysts for use in preparing bis-aryl amidoximes of the structure recited therein.

Thus, Applicants respectfully submit that claim 2 as amended meets the requirement of 35 U.S.C. § 112, second paragraph. Withdrawal of the rejection of pending claim 2 under 35 U.S.C. § 112, first paragraph, is therefore respectfully requested. Allowance of claim 2 also is respectfully requested. Further, Applicants also respectfully submit that claims 3-11, which are now ultimately dependent from claim 2, also meet the requirement of 35 U.S.C. § 112, second paragraph. Withdrawal of the rejection of pending claims 3-11 under 35 U.S.C. § 112, first paragraph, is therefore respectfully requested. Allowance of claims 3-11 also is respectfully requested.

CONCLUSION

In light of the above amendments and remarks, it is respectfully submitted that the present application is now in proper condition for allowance, and an early notice to such effect is earnestly solicited.

If any small matter should remain outstanding after the Patent Examiner has had an opportunity to review the above Remarks, the Patent Examiner is respectfully requested to telephone the undersigned patent attorney in order to resolve these matters and avoid the issuance of another Official Action.

DEPOSIT ACCOUNT

The Commissioner is hereby authorized to charge any fees associated with the filing of this correspondence to Deposit Account No. <u>50-0426</u>.

Respectfully submitted,

JENKINS, WILSON & TAYLOR, P.A.

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